

## **Proposed Sensitivity Tests for Consideration Applied to 2010 Base Case**

May 14, 2008

The Environ-Alpine team will perform across the board emissions reduction sensitivity runs for the July 5-30 2006 time frame by a percentage reduction of VOC or NO<sub>x</sub> (separately) from the 2010 base case inventory for a variety of source categories as proposed below. These sensitivity runs serve two purposes,

- they aid in helping to define more refined emissions control scenarios, and
- they provide episode specific model uncertainty information that may be useful later in a “Weight of Evidence” analyses.

All of the proposed sensitivity runs are devised to test the impact of the category reduction on ozone concentrations in the NAA. The 12 runs originally discussed in the Modeling Protocol have been refined to address issues raised during the stakeholder process including control of NO<sub>x</sub>, ethanol and beetle kill as follows:

- **20% Mobile Source On-road VOC reduction in NAA**
- **15% Evaporative Mobile Source VOC reduction in NAA**
- **0% ethanol penetration in NAA (VOC decrease, CO increase from base case assumed)**
- **30% reduction in Oil & Gas source VOC (O&G Point and Area) in NAA**
- **20% reduction in Point Source and Oil & Gas NO<sub>x</sub> in NAA**
- **20% reduction in Non-road Mobile VOC in NAA**
- **15% reduction in Area source VOC in NAA**
- **20% NO<sub>x</sub> reduction Statewide for Point and Oil & Gas sources**
- **20% VOC reduction Statewide for Point and Oil & Gas sources**
- **20% NO<sub>x</sub> reduction plus 20% VOC reduction Statewide for Point and Oil & Gas sources**
- **20% reduction in Point and Oil & Gas sources NO<sub>x</sub> in NAA plus 20% reduction in NO<sub>x</sub> at Rawhide and Pawnee**
- **Reduction in biogenic VOC due to Bark Beetle infestation**